

WAFER HOLDER FOR SEMICONDUCTOR MANUFACTURING DEVICE AND SEMICONDUCTOR MANUFACTURING DEVICE IN WHICH IT IS INSTALLED

Abstract

Wafer holder for semiconductor manufacturing and semiconductor manufacturing device in which the holder is installed, the wafer holder having a wafer-carrying surface, wherein the isothermal rating of its wafer-carrying surface is enhanced. In the wafer holder having a wafer-carrying surface, by making the spacing of electrodes for supplying power to electrical circuits formed either on a surface other than the wafer-carrying surface of the wafer holder, or else inside it, 10% or more of the wafer holder thickness, the temperature distribution in the wafer-carrying surface can be brought to within $\pm 1.0\%$. The electrical circuits can be heater circuits, electrostatic-chuck electrode circuits, RF electrode circuits, and high-voltage electrode circuits. One or more metals selected from the group being tungsten, molybdenum and tantalum preferably are incorporated into the portion of the power-supply electrodes that is directly connected to the circuits.